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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/560,842

12/15/2005

Takeshi Matsuda

JFE-05-1742

6829

35811 7590 04/06/2007  
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EXAMINER

LAVILLA, MICHAEL E

ART UNIT

PAPER NUMBER

1775

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/06/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

**Application No.**

10/560,842

**Applicant(s)**

MATSUDA ET AL.

**Examiner**

Michael La Villa

**Art Unit**

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 20051215.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.
2. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.
3. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.
4. The abstract of the disclosure is objected to because the Abstract exceeds 150 words. Correction is required. See MPEP § 608.01(b).
5. In the Preliminary Amendment of 15 December 2005, applicant proposes various changes to certain Tables in the Specification. It is unclear how the proposed amendment demonstrates what is being changed. Clarification is requested.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:
7. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
8. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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9. Regarding Claim 1, it is unclear resin A is permitted to be a polymer or whether it must be a polymer.
10. Regarding Claim 3, it is unclear what constitutes a "tetravalent vanadium (V(VI)) compound." It is unclear what is the relationship between the parenthetical text "(the metal may be contained as the compound and/or a complex compound)" and the claim limitations. It is unclear whether "may" in the parenthetical means that metal need not necessarily be compound and/or complex compound.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Matsuzaki et al. JP 2002-053980 in view of Komai et al. WO 2001/042530.

Matsuzaki et al. '980 teaches the claimed laminate of galvanized or aluminized

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steel substrate having a first coating of silica, phosphoric acid, and magnesium in the claimed amounts and a second coating of OH or COOH resin with the claimed additives. See Matsuzaki et al. '980 (paragraphs 38-58). Matsuzaki et al. '980 does not teach tetra-valent vanadium at 0.1-50 mg/m<sup>2</sup> in terms of V in a first layer coat. However, Komai et al. suggests treating a steel plate with a treatment liquid containing a compound of tetra-valent vanadium in order to improve its anti-rust characteristic. See Komai et al. (Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to include a vanadium compound of Komai in the first layer of Matsuzaki in order to improve anti-rust characteristic thereof.

14. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuzaki et al. JP 2002-053980 in view of Komai et al. WO 2001/042530 in further view of Matsuzaki et al. JP 2002-053979. Matsuzaki et al. '980 teaches the claimed laminate of galvanized or aluminized steel substrate having a first coating of silica, phosphoric acid, and magnesium in the claimed amounts and a second coating of OH or COOH resin with the claimed additives. See Matsuzaki et al. '980 (paragraphs 38-58). Matsuzaki et al. '980 does not teach tetra-valent vanadium at 0.1-50 mg/m<sup>2</sup> in terms of V in a first layer coat. However, Komai et al. suggests treating a steel plate with a treatment liquid containing a compound of tetra-valent vanadium in order to improve its anti-rust characteristic. See Komai et al. (Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to include a vanadium compound of Komai in the

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first layer of Matsuzaki in order to improve anti-rust characteristic thereof.

Matsuzaki et al. JP '980 may not teach the claimed resin of Claim 2. Matsuzaki et al. '979 teaches using the claimed resin of Claim 2 in laminates analogous to those of Matsuzaki et al. '980 in order to confer favorable protection. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the resin of Matsuzaki et al. '979 in the outer layer of Matsuzaki et al. '980 in order to confer favorable protection properties to the laminate of Matsuzaki et al. '980.


### ***Conclusion***

15. The prior art rejections set forth above are based on the analysis of inventive step set forth in the submitted IPER.
16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is (571) 272-1539. The examiner can normally be reached on Monday through Friday.
17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael La Villa  
1 April 2007

  
MICHAEL E. LAVILLA PH.D.  
PRIMARY EXAMINER